

m/015/061

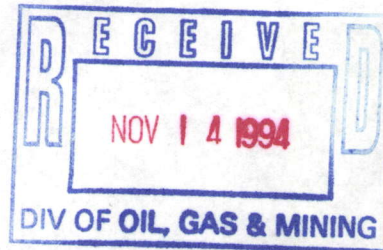


State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY

Michael O. Leavitt
Governor
Dianne R. Nielson, Ph.D.
Executive Director
Russell A. Roberts
Director

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Salt Lake City, Utah 84114 4820
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DAQE-978-94

November 10, 1994

Neil Mortensen
Western Clay Co.
PO Box 1067
Aurora, Utah 84620

RE: INTENT TO APPROVE OPEN PIT BENTONITE MINE
SEVIER COUNTY - CDS B ATT
Emery

Dear Mr. Mortensen:

The attached document is an Intent to Approve with Fee Statement for the above referenced project.

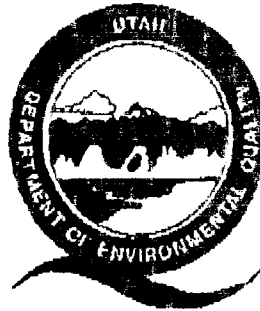
Future correspondence on this Approval Order should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Dale Chapman. He may be reached at (801) 536-4096.

Sincerely,

Lynn R. Menlove, Manager
New Source Review Section
Utah Division of Air Quality

LRM:DC:aj

cc: Central Utah District Health Department

M/015/061

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

INTENT TO APPROVE OPEN PIT BENTONITE MINE

PREPARED BY: DALE CHAPMAN, ENGINEER

INTENT TO APPROVE NUMBER
DAQE-978-94

Date: November 10, 1994

Source

WESTERN CLAY COMPANY

Russell A. Roberts
Executive Secretary
Utah Air Quality Board

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Abstract

Western Clay Co. (Bentonite Pit) mines, grinds and mills nonmetallic minerals, e.g., limestone, bentonite, gypsum, coke, fuller's earth and pozzolan. The mine is an existing source but no Approval Order has been issued. Therefore, the pit is being reviewed as a new source. The pit is located in Sevier County which has been designated as an attainment area. Western Clay Co. proposes to enlarge the mine in order to increase production. Over a five year period, the pit would be expanded from 5 to approximately 12 acres depending on customer demand. The corresponding increase in production will not exceed 70,000 tons of Bentonite per year.

The Notice of Intent (NOI) for the above-referenced project has been evaluated and has been found to be consistent with the requirements of the Utah Air Conservation Rules (UACR) and the Utah Air Conservation Act. Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an Approval Order (AO) by the Executive Secretary of the Utah Air Quality Board.

A Notice of Intent to issue an AO will be published in the Richfield Reaper on November 16, 1994. A 30-day period following the publishing date will be allowed during which the proposal and evaluation of its impact on air quality will be available for both you and the public to review and comment. If anyone so requests within 15 days of publication of the notice, a hearing will be held. The hearing will be held as close as practicable to the location of the source. Any comments received during the 30-day period and the hearing, if held, will be evaluated.

Please review the proposed AO conditions during this period and make any comments you may have before its closure. The proposed conditions of the AO may be changed as a result of the comments received. Unless changed, the AO will be based upon the following conditions:

General Conditions:

1. This AO applies to the following company:

Western Clay Company
P.O. Box 1067
Aurora, Utah 84620
(801) 529-3281
(801) 529-3714

The equipment listed below in this AO shall be operated at the following location:

PLANT LOCATION:

Take Exit 89 on I 70 and go south on county maintained road (it goes east ~2 miles and turns south). Approximately seven miles from freeway Exit 89 the road forks, take the right fork going south. After ~3.8 miles, take the road to the left going east. Proceed for ~1 mile and take the fork to the right. Mine property is ~1,000 feet ahead.

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Universal Transverse Mercator (UTM) Coordinate System:
4,278,600 meters Northing, 474,900 meters Easting

2. Definitions of terms, abbreviations, and references used in this AO conform to those used in the UACR, Utah Administrative Codes (UAC), and Series 40 of the Code of Federal Regulations (40 CFR). These definitions take precedence unless specifically defined otherwise herein.
3. Western Clay Company shall enlarge their Bentonite Pit from five (5) acres to approximately 12 acres according to the information submitted in the Notice of Intent dated July 14, 1994.
4. A copy of this AO shall be posted on site. The AO shall be available to the employees who operate the air emission producing equipment. These employees shall receive instruction as to their responsibilities in operating the equipment according to all of the relevant conditions listed below.
5. The approved installations shall consist of the following existing equipment:
 - A. Front-end loader
 - B. Dozer
 - C. Tractor with disc type plow
6. The Executive Secretary shall be notified in writing upon start-up of the construction, as an initial compliance inspection is required. Eighteen months from the date of this AO the Executive Secretary shall be notified in writing of the status of construction if construction is not completed. At that time the Executive Secretary shall require documentation of the continuous construction of the operation and may revoke the AO in accordance with R307-1-3.1.5, UAC.

The equipment listed and BACT plan accepted in this AO must be in place by the above eighteen month deadline. However, the expansion of the mine may proceed on the proposed five year schedule as long as the production limits and emission rates set forth in this AO are not exceeded.

Limitations and Tests Procedures

7. Western Clay Co. shall implement the following dust control plan to minimize fugitive dust and emissions at the open pit mine. Opacity readings will be made at each point in accordance with Method 9. Visible emissions due to overburden removal, mining operation using farm tractor and disc plow, front-end loader, and

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truck traffic on the haul road to the public road shall not exceed the following requirements.

For overburden removal, if visible emissions are equal to or less than 20% opacity (Level 1), no direct control is necessary. Visible emissions determinations for dozer operation shall use procedures similar to Method 9, the requirement for observations to be made at 15-second intervals over a six-minute period shall apply. Should emissions exceed Level 1 parameters, the area to be removed will be presoaked with water. If high winds, material moisture and presoaking do not provide sufficient control to keep emissions within Level 1 parameters, dozing will be suspended for the day.

For bentonite ore mining implements, if visible emissions are equal to or less than 20% opacity (Level 1), no direct control is necessary. Visible emissions determinations shall use procedures similar to Method 9, but the requirement for observations to be made at 15-second intervals over a six-minute period shall not apply. If winds and low moisture allow dust from the tractor wheels and disc action to exceed 20% opacity, tractor speed will be reduced or operation of the equipment suspended.

For gathering and loading ore, if visible emissions are equal to or less than 20% opacity (Level 1), no direct control is necessary. The drop distance will be minimized or loading will be relocated to an area of higher moisture content in the ore, if Level 1 opacity standards are exceeded. Visible emissions determinations shall use procedures similar to Method 9, the requirement for observations to be made at 15-second intervals over a six-minute period shall apply. If visible emissions exceed the 20% opacity requirement after drop distance minimization or relocating has occurred, loading of ore will be suspended for the day or until better conditions exist.

For haul road dust control, speed limits of 20 mph will be posted. If visible emissions exceed 20% opacity, truck speed will be reduced to ten (10) mph. If with the speed reduction, emissions still exceed 20% opacity, hauling of ore will be suspended for the day or until the road can be watered.

8. Visible emissions from the following emission points shall not exceed the following values:
 - A. All diesel engines - 20% opacity
 - B. Haul roads, operation areas, disturbed areas, storage piles - 20% opacity
 - C. Front-end loader operation - 20% opacity
 - D. All other points - 20% opacity

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Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. Visible emissions from mobile sources and intermittent sources shall use procedures similar to Method 9, but the requirement for observations to be made at 15-second intervals over a six-minute period shall not apply.

Visible emissions from haul road traffic shall not exceed 20% opacity. Visible emissions determinations for traffic sources shall use procedures similar to Method 9, but the requirement for observations to be made at 15-second intervals over a six-minute period shall not apply. Six points, distributed along the length of the haul road, shall be chosen by the Executive Secretary or his representative. An opacity reading shall be made at each point when a vehicle passes the selected points. Opacity readings shall be made $\frac{1}{2}$ vehicle length or greater behind the vehicle. The accumulated six readings shall be averaged for the compliance value.

9. The following production limits shall not be exceeded without prior approval in accordance with R307-1-3.1, UAC:
 - A. 70,000 tons of ore per 12-month period.
 - B. 1,100 hours per 12-month period for loader diesel engine operation.
 - C. 1,000 hours per 12-month period for tractor diesel engine operation.
 - D. 750 hours per 12-month period for dozer diesel engine operation.

Compliance with the annual limitations shall be determined on a rolling 12-month total. The owner/operator shall calculate a new 12-month total based on the first day of each month using data from the previous 12 months. Records of production shall be kept for all periods when the plant is in operation. Records of production, including rolling 12-month totals shall be made available to the Executive Secretary or his representative upon request and shall include a period of two years ending with the date of the request. Production shall be determined by the operations log. The records shall be kept on a daily basis. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log.

Roads and Fugitives

10. All unpaved roads and other unpaved operational areas outside the pit that are used by mobile equipment shall be water sprayed to control fugitive dust. Treatment shall be of sufficient frequency and quantity to maintain the surface

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material in a damp/moist condition. If 20% opacity is exceeded, operation shall be suspended for the day or until the road is watered. The opacity shall not exceed 20% during all times the areas are in use. Records of water treatment shall be kept for all periods when the plant is in operation. The records shall include the following items:

- A. Date
- B. Number and quantity of treatments made
- C. Rainfall received, if any, and approximate amount
- D. Time of day treatments were made

Records of treatment shall be made available to the Executive Secretary upon request and shall include a period of two years ending with the date of the request.

11. The haul road limitations shall be:

- A. 0.38 miles in roundtrip length
- B. 20 miles per hour

These limitations shall not be exceeded without prior approval in accordance with R307-1-3.1, UAC. The haul road speed limit shall be posted.

Records & Miscellaneous

- 12. All installations and facilities authorized by this AO shall be adequately and properly maintained.
- 13. The owner/operator shall comply with R307-1-4.7, UAC. This rule addresses unavoidable breakdown reporting requirements. The owner/operator shall calculate/estimate the excess emissions whenever a breakdown occurs. The total of excess emissions shall be reported to the Executive Secretary as directed for each calendar year.

Any future modifications to the equipment approved by this order must also be approved in accordance with R307-1-3.1.1, UAC.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including the UACR.

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Annual emissions for this source, the entire mine, are currently calculated at the following values:

	<u>Pollutant</u>	<u>Tons/yr</u>
A.	Particulate	8.30
B.	PM ₁₀	3.90
C.	SO _x	1.30
D.	NO _x	19.80
E.	CO	4.30
F.	VOC	1.60
G.	Aldehydes	0.30

These calculations are for the purposes of determining the applicability of Prevention of Significant Deterioration and Nonattainment area major source requirements of the UACR. They are not to be used for purposes of determining compliance.

The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. Unless public comments are received which require additional work, the fee for this AO will be \$1,000.00. An invoice is attached. You may pay this fee prior to the end of the comment period. If there are comments or additional fees, you will be notified.

Sincerely,



Lynn R. Menlove, Manager
New Source Review Section
Division of Air Quality

LRM:DC:aj

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WESTERN CLAY
Western Clay
Saviler County - CDS B ATT

Filing Fee	\$ 1,000.00
Review Engineer . . . 0.00 hours @ \$50.00/hr	\$ 0.00
Modeler 0.00 hours @ \$50.00/hr	\$ 0.00
Computer Fee	\$ 0.00
Notice To Paper	\$ 0.00
Travel 0.0 miles @ \$0.23/mile	\$ 0.00
=====	
Total Charges	\$ 1,000.00
Amount Paid to Date	\$ 0.00
=====	
Balance Due	\$ 1,000.00

Please remit a copy of this invoice with your payment.

Please send payment to:

Utah Division of Air Quality
1950 West North Temple
Salt Lake City, Utah 84114-8420
(801) 536-4000